Journal of Artificial Intelligence, Machine Learning and Data Science

Research Article

Redesigning of Salesforce Dashboard Components for Real-Time Analytics

Satwik Mamidi*

*Corresponding author: Satwik Mamidi, Salesforce Developer, USA, E-mail: m.satwik16@gmail.com

A B S T R A C T

The present article explored the essentials for redesigning the dashboard of Salesforce while integrating real-time data analytics. The current dashboard of Salesforce significantly lacks real-time data input which further lacks real-time data insights which can impact the effectiveness of the decision-making of client businesses. The proposed solution to address the gap includes the integration of AI-powered tools that can help in providing dynamic updates depending on real-time data extractions from different sources.

Effective implementation of the new dashboard will require effective integration with cloud systems as well as the new dashboard should be more scalable as it will process a wider amount of data compared to the previous CRM systems. These real-time analytics will help in enhancing the responsiveness of companies to rapidly changing business environments and also enhance their competitive advantage.

Keywords: Salesforce Dashboard, Real-time Analytics, Real-time Data, AI-Powered Tools

1. Introduction

Salesforce is one of the most trusted CRM systems that is utilized by organizations worldwide. The main reason behind utilizing the Salesforce systems is to effectively and efficiently handle large volumes of customer data, accurate data analysis and gain insights from business data as well as automate business processes which helps in enhancing the overall business performance. In this context, there is a need to understand that Salesforce significantly offers a wide range of activities for businesses such as customer services, commerce, marketing initiatives and many other processes **(Figure 1)**.

The main aim of this paper is to evaluate the importance of redesigning the dashboard components of Salesforce to implement real-time data analytics in a more effective and efficient way. This paper will also evaluate the effective process of implementation, considerations related to implementation and also potential benefits.
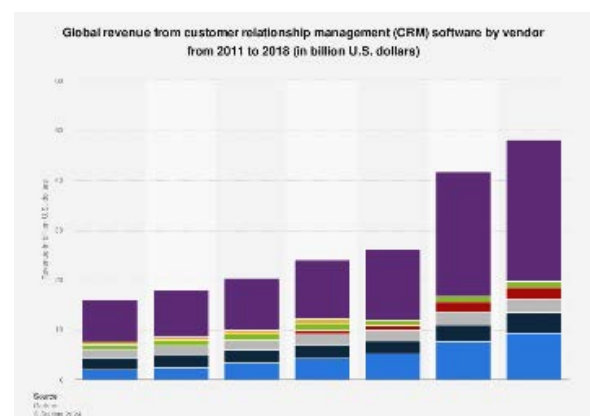

Figure 1: Market share of CRM vendors worldwide 2012-2018[1].

2. Background

The dashboard of Salesforce significantly aggregates data after a certain interval that has been previously scheduled.

There is a lack of flexibility and a limited number of users who can respond to some events in real time. In this present era of rapidly shifting business landscape all of the businesses need to react faster to the rapidly changing market condition. In order to achieve this real-time data streaming has become significantly important for Salesforce to provide support to its client organizations.

In addition to that, being agile to the market shifts is significantly important for the success of an organization. In order to address this gap, there is a need to leverage advanced technologies such as Artificial Intelligence (AI) driven solutions, cloud computing as well as streaming analytics[5]. Thus, integration of these technologies into Salesforce is important to generate live updates through the incorporation of real-time data which can further improve the effectiveness and efficiency of its predictive insights.

In addition to that, there is also a need to design and develop an effective and user-friendly dashboard of Salesforce which can help businesses to leverage the advanced solutions for their businesses. This will further help a business to enhance its agility and report promptly to the market shifts **(Figure 2)**. Thus, integration of Real-time data analytics can significantly help a business to gain success by improving its overall operational efficiency while reducing operational costs[6].
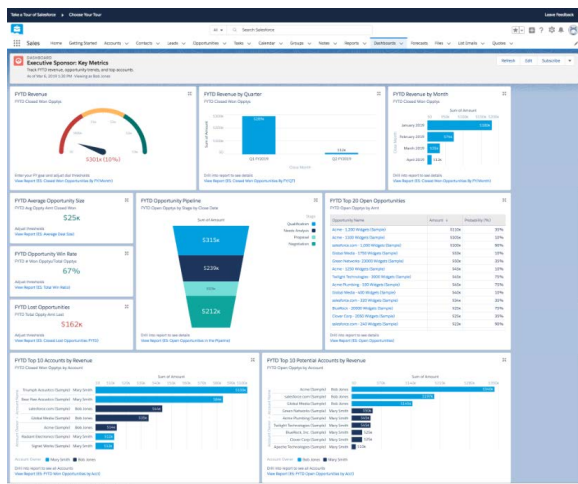

Figure 2: Salesforce Executive Sponsor Dashboard[2]

One of the biggest examples of implementation real-time big data analytics for gaining more efficiency and accurate insights from real-time data is Microsoft. This technology has helped Microsoft to gain exact real-time data insights and also enhanced visualization of data insights in visual motions[14].

Further there is a need to develop a deeper understanding regarding Kafka data streaming architecture which is significantly important to understand the role of Kafka in real-time dianalytic. Kafka significantly helps in stream as well as process of large volume of data from different sources CRM systems, files or images, applications and web applications with significantly lower latency level[8]. Kafka helps to manage streaming of large volume of data by breaking large data into smaller pieces which is called "stream". In addition to that, Kafka architecture is significantly important in processing real-time data as soon as the data is generated which further enhance the time accuracy of gaining data insights. Integration of AI tools into the Kafka architecture can further enhance the accuracy and efficiency of the real-time data analysis and gaining visible results from live data streaming **(Figure 3)**.
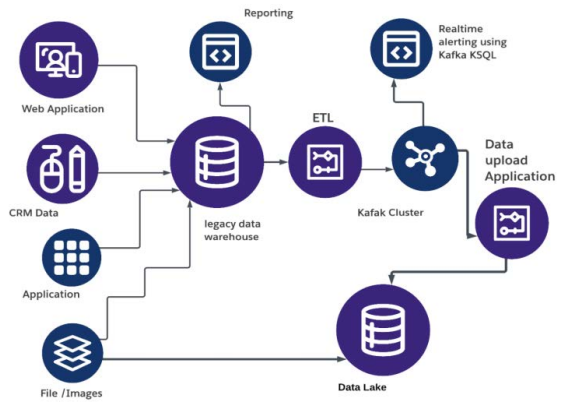

Figure 3: Kafka Data Stream for Migration Data Lakes[8].

3. Problem Statement

The main problem area is there is a lack of ability to offer real-time data in the current dashboard of Salesforce which further restricts the businesses from inputting rapidly changing business environmental data. This further reduces the ability of businesses to become more responsive and proactive to the rapidly shifting markets. This significant delay in gaining actionable insights from the data can significantly impact the efficiency of decision-making on time. This can further reduce the ability of a business to react promptly to the market changes and the business may lose revenue.

4. Proposed Solution

The proposed solution for the gap mentioned above is a need to integrate advanced technologies such as AI-powered tools to allow Salesforce dynamic updates, prompt and accurate predictive analysis depending on real-time data and also develop interactive visuals[7]. Further, there is also a need to design user-friendly dashboard components that can help businesses to easily input real-time data.

A. Key Features:

- **Real-time Data Streaming**: The main features of the updated dashboard will be real-time data updating on the dashboard from different data sources which will enhance the accuracy of the data insights or market insights. Implementation of Kafka-based architecture can help Salesforce to develop data lakes[8].
- **Interactive Visuals**: There is a need to enhance the visuals utilizing drill-down features which will help the users to gain deeper insights from the real-time data streaming and updates.
- **Predictive Analytics**: The real-time data update will help in real-time and informative predictions of potential market shifts which will further help the business to develop strategies to cope with the changing market trends[9].

B. Considerations of Implementation:

- **Integration with Cloud Systems:** First of all, there is a need to manage a seamless cloud integration of the system which will help in maintaining seamless data flow. It is important for promoting a continuous real-time data update to the system.
- **Scalability:** Salesforce helps its clients to handle large amounts of data. Real-time data updating will significantly enhance the amount of data that the system needs to handle for its client businesses **(Figure 4)**.
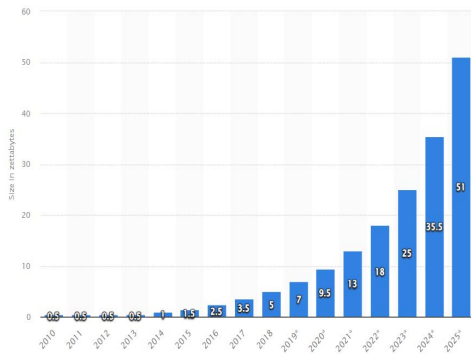
Figure 4: Global datasphere real time data total size worldwide from 2010 to 2025[13]

Depending on the above graph it can be seen that the real-time data volume currently 35.5 zettabytes and that will be increased to 51 zettabytes till 2025. Thus, a large system should be scalable to this large volume of data which will enhance the overall efficiency of the CRM system of Salesforce.

Thus, there is a need to design a significantly scalable system dashboard that will be able to handle vast amounts of data without any latency[10].

- **User Training:** After integration of new real-time data analytics features into the dashboards the company also needs to provide training to the employees to ensure that they can utilize the CRM system more efficiently and also utilize the new feature to enhance the real-time data analysis and improve predictive insights **(Figure 5)**.
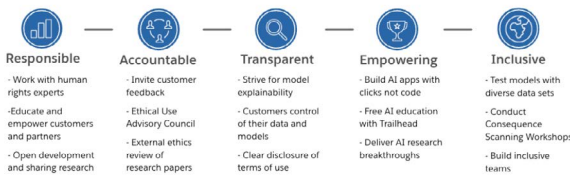

Figure 5: Salesforce's Trusted AI Principles[3].

5. Methodology

The methodological approach will be focused on the integration of AI-enabled analytics into Salesforce to gain insights into donor behaviors. There will be a systematic approach:

- **Data Collection:** The system will gather historical data as well as live data from different data sources which will enhance the accuracy of insights through analyzing both real-time and historical data.

- **AI-Modelling:** There is also a need to develop an Artificial Intelligence Model that will help in the prediction of behavior patterns on a real-time basis.

- **Dashboard Integration:** Further there is a need to design and integrate the AI-driven insights into the dashboard of Salesforce which will help the users to gain easy and convenient access and visuals of the real-time insights depending on the data and analysis[11].

- **User Feedback:** After the implementation of the new dashboard for real-time data integration and analysis there is a need to gather feedback from the active users which will help in the identification of areas to be improved to enhance the efficiency and effectiveness of Salesforce.

6. Results And Discussion

Integration of real-time data analytics into Salesforce and designing its dashboard with the components will help businesses gain immediate access to real-time data insights which further help a business to gain an understanding of the market condition and changing trends which further help the businesses to develop more informed decisions[12]. The integration of advanced technologies such as Artificial Intelligence driven data gathering and data analytics will significantly help in enhancing the accuracy of the predictions which will further provide significant competitive advantage in this rapidly changing business landscape. In addition to that, early testing of suggestions will further help in enhancing responsiveness and also enhance operational efficiency. This will further help Salesforce to enhance user engagement and also enhance the target user base of the CRM system of the organization. Further evaluation is needed regarding the interaction done by different professions of user businesses such as employees from their departments like Human Resources, Marketing, Project Management, IT, Sales and others. This will help in actual understanding of the impact of new dashboard of Salesforce which can further help in gaining insights regarding areas of improvement **(Figure 6)**.
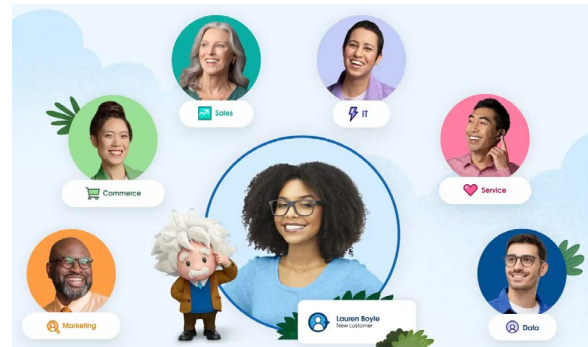

Figure 6: Benefits of Salesforce CRM[4].

7. Conclusion

It can be stated that effective implementation of advanced technologies such as Artificial intelligence will be beneficial to develop a real-time data analytics-enabled dashboard for Salesforce. This will help the company to develop predictions more efficiently depending on which the businesses will gain an understanding of real-time market conditions and trend shifts. This will help the organization to gain a competitive advantage. There are different considerations that should be kept in mind while designing the dashboard such as user-efficiency. In addition to that, effective integration with the cloud system is also important for sourcing data from different resources. This will enhance the operational efficiency of client businesses in different operational processes.

8. References

1. Statista. Market share of CRM vendors worldwide 2012-2018. Statista, 2018.

2. Salesforce AppExchange. Preconfigured Sales Cloud Dashboards. Salesforce, 2021.

3. Baxter K. Meet Salesforce's Trusted AI Principles. Salesforce, 2021.

4. Salesforce. The 11 Greatest Benefits of CRM Platforms. Salesforce, 2020.

5. Majeed A, Hwang SO. Data-driven analytics leveraging artificial intelligence in the era of COVID-19: an insightful review of recent developments. Symmetry, 2021;14(1):16.

6. Ashrafi N, Kelleher L, Kuilboer JP. The impact of business intelligence on healthcare delivery in the USA. Interdisciplinary Journal of Information, Knowledge and Management, 2014;9:117.

7. Bala BM. Artificial Intelligence and its Implications for Future. Artificial Intelligence, 2019.

8. Singh A, Ahmad S. Architecture of data lake. International Journal of Scientific Research in Computer Science, Engineering and Information Technology, 2019;5(2):4-4.

9. Saritas O, Bakhtin P, Kuzminov I, Khabirova E. Big data augmentated business trend identification: the case of mobile commerce. Scientometrics, 2021;126(2):1553-1579.

10. Hassan A, Mhmood AH. Optimizing network performance, automation and intelligent decision-making through real-time big data analytics. International Journal of Responsible Artificial Intelligence, 2021;11(8),12-22.

11. Pearson A. Personalisation the artificial intelligence way. Journal of Digital and Social Media Marketing, 2019;7(3):245-269.

12. Henrys K. Role of predictive analytics in business. Available at SSRN 3829621, 2021.

13. Tylor P. Global datasphere real time data total size worldwide from 2010 to 2025. Statista, 2020.

14. Microsoft. What is Real-Time Intelligence?, 2020.